EPOS for Coordination of Asynchronous Sensor Webs

Completed Technology Project (2012 - 2015)

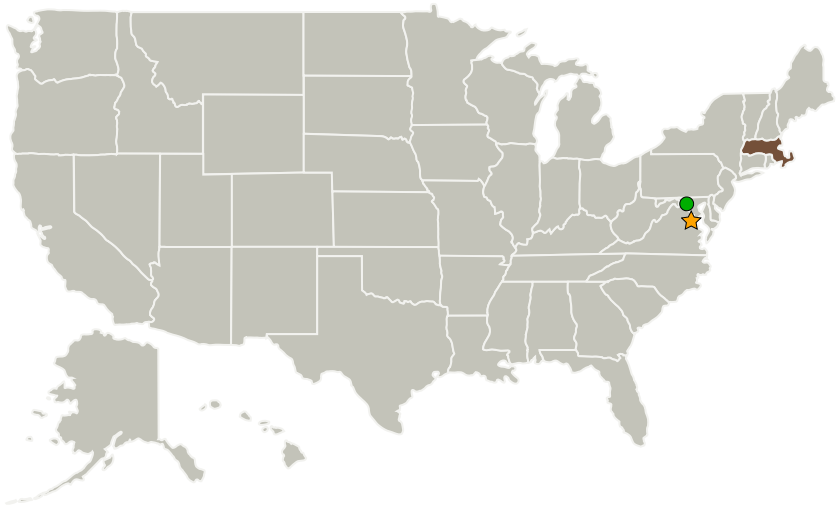
Project Introduction

Develop, integrate, and deploy software-based tools to coordinate asynchronous, distributed missions and optimize observation planning spanning simultaneous observations across multiple sensor systems to improve science return from Earth observing systems
Develop and infuse situation awareness, situation assessment, planning and scheduling technologies for the coordination of independently managed missions into the Draper Earth Phenomena Observation System (EPOS)
Infuse EPOS into NASA Earth science missions including HS3, ATTREX, and EO-1
Demonstrate the resulting integrated "system of systems" targeting disaster data management

Anticipated Benefits

Broad Application

Primary U.S. Work Locations and Key Partners



Project Image EPOS for Coordination of Asynchronous Sensor Webs

Table of Contents

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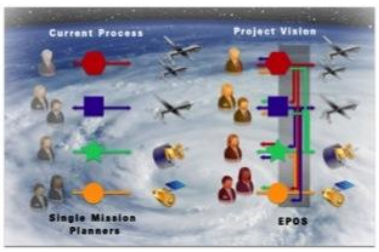
Organizations Performing Work	Role	Type	Location
★NASA Headquarters(HQ)	Lead Organization	NASA Center	Washington, District of Columbia
●Goddard Space Flight Center(GSFC)	Supporting Organization	NASA Center	Greenbelt, Maryland
The Charles Stark Draper Laboratory, Inc.	Supporting Organization	R&D Center	Cambridge, Massachusetts

Primary U.S. Work Locations
Massachusetts

Images



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Project Image EPOS for Coordination of Asynchronous Sensor Webs
(https://techport.nasa.gov/image/1630)

Organizational Responsibility

Responsible Mission Directorate:
Science Mission Directorate (SMD)

Lead Center / Facility:
NASA Headquarters (HQ)

Responsible Program:
Earth Science

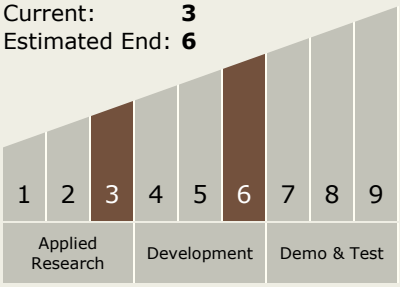
Project Management

Program Director:
George J Komar

Principal Investigator:
Stephan Kolitz

Technology Maturity (TRL)

Start: **3**
Current: **3**
Estimated End: **6**



Technology Areas

Primary:

Continued on following page.

Technology Areas *(cont.)*

- TX10 Autonomous Systems
  - TX10.2 Reasoning and Acting
    - TX10.2.2 Activity and Resource Planning and Scheduling

Target Destination

Earth